



NKANGALA DISTRICT MUNICIPALITY BULK WATER SUPPLY AND STORAGE AT HLALANIKAHLE AND EXTENSION 5 SCHEDULE 1 : PRELIMINARY & GENERAL						
ITEM NO	PAYM. REF.	DESCRIPTIN	UNIT	QTY	RATE	AMOUNT R
	SANS 1200AA	<u>GENERAL</u>				
1.1	8.3	<u>FIXED CHARGE AND VALUE-RELATED ITEMS</u>				
1.1.1	8.3.1	Contractual Requirements	sum	1		
1.1.2	8.3.2	<u>Establish facilities on site</u>				
1.1.2.1	8.3.2.1	i) <u>Facilities for Engineer</u> a) Furnished offices (1 no)	Sum	1		
1.1.2.2		b) Name Boards (2 no)	No	2		
1.1.2.2	8.3.2.2	ii) <u>Facilities for Contractor</u> a) Offices and storage sheds	sum	1		
		b) Living accommodation	sum	1		
		c) Ablution and latrine facilities	sum	1		
		d) Tools and equipment	sum	1		
		e) Water supplies, electric power and communication	sum	1		
		f) Dealing with water	sum	1		
		g) Access	sum	1		
		h) Plant	sum	1		
1.1.3		<u>Occupational Health and Safety</u>				
		a) General safety & safety equipment	sum	1		
		b) Preparation of the Health & Safety Plan	sum	1		
		c) Providing of method statement and complying with requirements of the Environmental Management Plan	sum	1		
1.1.4	8.3.3	Other fixed charge obligations	sum	1		
1.1.5	8.3.4	Removal of site establishment	sum	1		
	SANS 1200AA					
1.2	8.4	<u>TIME RELATED ITEMS</u>				
1.2.1	8.4.1	Contractual requirements	sum	1		
1.2.2	8.4.2	<u>Operations and maintenance of facilities on site</u>				
1.2.2.1	8.4.2.1	<u>Facilities for Engineer</u>				
		a) Furnished offices (1 no)	Sum	1		
		b) Name Boards (2 no)	No	2		
CARRIED FORWARD						

Tenderer

Witness 1

Witness 2

Employer

Witness 1

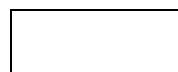
Witness 2



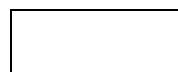
NKANGALA DISTRICT MUNICIPALITY BULK WATER SUPPLY AND STORAGE AT HLALANIKAHLE AND EXTENSION 5 SCHEDULE 1 : PRELIMINARY & GENERAL						<u>Schedule 1</u> Preliminary & General
ITEM NO	PAYM. REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
BROUGHT						
1.2.2.	8.4.2.	<u>Facilities for Contractor</u> a) Offices and storage sheds b) Living accommodation c) Ablution and latrine facilities d) Tools and equipment e) Water supplies, electric power and f) Dealing with water g) Access h) Plant	sum	1		
			sum	1		
			sum	1		
			sum	1		
			sum	1		
			sum	1		
			sum	1		
1.2.3		<u>Occupational Health and Safety</u> Allow for compliance with all aspects of the OH&S Act No. 85, 1993 including: risk assessment; provision of safety plan; appointment of safety officer; safety training (induction) of workforce and notification(s) to the Department of Labor	sum	1		
1.2.4	8.4.3	Supervision for duration of the construction	sum	1		
1.2.5	8.4.4	Company and Head Office overhead costs for the duration of the Contract	sum	1		
1.2.6	8.4.5	Other time related obligations	sum	1		
1.3	8.5	<u>SUMS STATED PROVISIONALLY BY THE ENGINEER</u>				
1.3.1		Employment of a Community Liaison Officer for the duration of the contract. Rate as per the current Municipal approved rate. Allow a budget amount of R7000 / month	Prov Sum	1		R 56 000,00
1.3.2		Extra over Item 1.3.1 for the administration of payment	%	R 56 000,00	10%	R 5 600,00
1.3.3		Specific control tests as ordered by the Engineer	Prov Sum	1	R 50 000,00	R 50 000,00
TOTAL SCHEDULE 1 CARRIED FORWARD TO SUMMARY						



Tenderer



Witness 1



Witness 2



Employer



Witness 1



Witness 2



NKANGALA DISTRICT MUNICIPALITY							Schedule 2
BULK WATER SUPPLY AND STORAGE AT HLALANIKAHLE AND EXTENSION 5							Pipework
ITEM NO	LI	PAYM. REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
2.1		SABS 1200 DB	EARTHWORKS PIPE TRENCHES				
2.1.1	LI	8.3.1(a)	Clear vegetation and trees of girth up to 1 m	m	100		
2.1.2	LI	8.3.1(b)	Clear trees of girth over 1 m	no	10		
2.1.3		SABS 1200C 8.2.5	Remove and re-erect Fences	m	100		
2.2			EXCAVATION				
2.2.1	LI	8.3.2(a)	Excavation in all materials for trenches for water pipes up to 200mm diam. Rates to include backfill, compact and dispose of surplus materials.	m			
		a)	Up to 1,5m deep	m	2200		
	LI	b)	Over 1,5 up to 2,5m deep	m	20		
		c)	Over 2,5 up to 3,5m deep (Provisional)	m			Rate Only
2.2.2		8.3.2(b)	<u>Extra-over item 6.2.1 for</u>	m³	2100		
		a)	Intermediate excavation	m³	350		
		b)	Hard rock excavation	m³	3140		
2.2.3	LI	8.3.2(c)	Excavate and dispose of unsuitable material from trench bottom (Provisional)	m³	325		
2.2.4	LI	8.3.3.1(b)	Import backfill material from designated borrow pits (Provisional)	m³			
2.2.5	LI	8.3.3.3	<u>Extra-over items 6.2.1 a) to c) incl. for (prov):</u> Compaction of trenches across road reserves	m³	300		
2.2.6		8.3.3.4	<u>Overhaul</u>	m³.km	2250		
		a)	long overhaul over 0,5 km (Provisional)				
2.3		SABS 1200LB	PIPE BEDDING				
2.3.1	LI	8.2.1	<u>Selected granular material for bedding & cradle</u>	m³	230		
	LI	8.2.2.2	a) Trench excavation	m³	100		
	LI	8.2.2.2	b) Borrow pits (Provisional)	m³			
2.3.2		SABS 1200LB	<u>Provision of selected fill material for pipe blanket</u>	m³	460		
	LI	8.2.1	a) Trench excavation	m³			
	LI	8.2.2.2	b) Borrow pits (Provisional)	m³	200		
2.3.3	LI	8.2.3	<u>Concrete bedding cradle</u>	m³	5		
2.3.4	LI	8.2.4	<u>Encasing of pipes in concrete</u>	m³	15		
2.3.5		8.2.5	Overhaul for imported material for bedding cradle and selected fill blanket (Provisional)	m³.km	600		
CARRIED FORWARD							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

C2.2: Bill of Quantities



NKANGALA DISTRICT MUNICIPALITY

Schedule 2

BULK WATER SUPPLY AND STORAGE AT HLALANIKAHLE AND EXTENSION 5
SCHEDULE 2 : PIPEWORK

Pipework

ITEM NO	LI	PAYM. REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
BROUGHT FORWARD							
2.4 2.4.1	LI	SABS 1200L 8.2.1	PIPES AND FITTINGS Supply, handle, lay, and bed on Class C bedding, test, and disinfect uPVC water supply mains with mechanical rubberising integrating coupling to SABS 966 a) 110 mm Ø uPVC class 9 pipeline b) 160 mm Ø uPVC class 9 pipeline	m	150		
2.4.2	LI	8.2.2	Supply, lay and bed Flanged steel pipes on Class C bedding 300WA steel, t=4.5mm (Flanges SANS1123-1000) a) 100 mm dia b) 150 mm dia	m	150	Rate only	
				m	1900	Rate only	
2.4.3	LI		Long radius bends uPVC Class 16 couplings 110 mm Ø uPVC a) 90° bend b) 45° bend c) 22.5° bend d) 11.25° bend	no	5		
2.4.4	LI		160 mm Ø uPVC a) 90° bend b) 45° bend c) 22.5° bend d) 11.25° bend	no	9		
2.4.5	LI		Tees CI Class 16 socket ended incl. a) 160 x 160 mm b) 250 x 160 mm b) 160 x 75 mm	no	3		
2.4.6	LI		Hydrant Tees CI Class 16 socket ended incl. a) 200 mm	no	3		
2.4.7			Reducers (uPVC) a) 250 x 200 mm b) 250 x 160 mm b) 250 x 110 mm	no	1	Rate only	
2.4.8	LI	8.2.3	Extra over 6.4.1 for the Supplying, Fixing and bedding of Valves Gate valves Cast Iron for uPVC (Right hand closing - flanged) "Hawle, AVK" or similar approved complete with VJ flange adaptor or CI flange adaptor a) 110 mm b) 160 mm c) 250 mm	no	2		
				no	2		
				no	2		
CARRIED FORWARD							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

C2.2: Bill of Quantities



Project No: 185527

**CONSTRUCTION OF BULK WATER SUPPLY AND STORAGE AT
HLALANIKAHLE & EXTENSION 5****NKANGALA DISTRICT MUNICIPALITY**Schedule 2**BULK WATER SUPPLY AND STORAGE AT HLALANIKAHLE AND EXTENSION 5**
SCHEDULE 2 : PIPEWORKPipework

ITEM NO	LI	PAYM. REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
BROUGHT FORWARD							
2.4.9	LI		<u>Scour valves</u> (Right hand closing - flanged - drilled SABS 1123 Table 16 - complete with scour-tee, couplings and fittings)- all pipe items and fittings to be priced as per dwg 303 a) 100 mm valve on 160mm uPVC pipe b) 100 mm valve on 250mm uPVC pipe	no	3		
2.4.10	LI		<u>Air valves</u> (Double acting - complete with fittings and couplings as per drawing) "Ventomat" or similar approved- all items to be priced as per dwg 303 b) 80mm Ø	no	1	Rate Only	
2.4.11	LI	8.2.13	<u>Isolating / air valve box:</u> Complete as per Drawing 303	no	3		
2.4.12	LI	8.2.13	<u>Scour valve chamber:</u> Complete as per Drawing 303	no	1	Rate Only	
2.4.13	LI	8.2.11	<u>Thrust / Anchor Blocks:</u> As per Drawings a) Concrete volume < 0,8m ³ b) Concrete volume > 0,8m ³	no	20		
2.5	SABS 1200L	<u>GENERAL ALLOWANCES</u>		no	4		
		Connect new bulk pipelines to existing bulk pipelines or disconnect existing pipes from the existing		no	90		
		Excavation by hand to locate Existing ring main connections- including backfilling and compaction installation of valves		no	30		
		Existing services to be protected/ relocated or replaced as ordered by the Engineer		Prov sum	1	R 200 000,00	
		Allowance for 15m long horizontal drilling (300mm) in intermediate material, HDPE RHO Struct Sleeve, 300mm stainless steel clamps, inclusive of site establishment and installation.		m ³	10		
				Pov Sum	1	R 300 000,00	
2.5.1				No	2		
TOTAL SCHEDULE 2 CARRIED FORWARD TO SUMMARY							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



Project No: 185527

CONSTRUCTION OF BULK WATER SUPPLY AND STORAGE AT
HLALANIKAHLE & EXTENSION 5

NKANGALA DISTRICT MUNICIPALITY

BULK WATER SUPPLY AND STORAGE AT HLALANIKAHLE AND EXTENSION 5

Schedule 3

Boreholes

SCHEDULE 3 : BOREHOLE

ITEM NO	PAYM. REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
3.		BOREHOLE SITING A registered geologist to performs borehole siting in accordance with SANS 10299 by conducting geological and hydrogeological assessments, analyzing subsurface formations, and selecting optimal drilling locations.				
3.1	SANS 10299-1	Borehole siting, GIS, data capturing and reporting a) supervision of the Geo-hydrologist/Geo-hydrological Engineer	No	1		
3.2	SANS 10299-2	BOREHOLE DRILLING & EQUIPPING				
3.3		AIR PERCUSSION DRILLING				
3.3.1		a) Drilling up to 8.5"(0-50m)	m	100		
3.3.2		b) Drilling up to 10"(0-100m)	m	100		
3.4		Extra-over item 3.3 for (to be substantiated by drilling logs of geohydrologist)				
3.4.1		a) 100 to 120 plus 20%	m		Rate Only	
3.4.2		b) Drilling hard Dolorite, Nortite formations plus 15%	m		Rate Only	
3.4.3		c) Drilling Quarzite formations plus 45%	m		Rate Only	
3.4.4		d) Drilling loose formations boulders and mud	m		Rate Only	
3.7		PERFORATED FACTORY CASING				
3.7.1		a) Casing 177mm OD x4mm	m	60		
3.8		OTHER DRILLING RATES				
3.8.1		a) Borehole Reaming	m	60		
3.8.2		b) Silica Gravel 3-7mm 40 Kg	bag	4		
3.8.3		c) Bentonite bag 40 kg	bag	4		
3.8.4		d) Bentonite drum 20L bag 40 kg	drum	2		
3.8.5		e) Bentonite sanitary seal	p/bh	2		
3.8.6		f) Drill and drive	p/bh	2		
3.8.7		g) Drilling foam	p/bh	2		
3.8.8		h) Supply of drilling water.	L	5000		
3.8.9		i) Formation stabilizer(supply, deliver, install)	p/bh	2		
3.8.10		j) Borehole disinfection	p/bh	2		
3.8.11		k) Borehole protection boxes	p/bh	2		
CARRIED						

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



NKANGALA DISTRICT MUNICIPALITY BULK WATER SUPPLY AND STORAGE AT HLALANIKAHLE AND EXTENSION 5 SCHEDULE 3 : BOREHOLE				Schedule 3 Boreholes		
ITEM NO	PAYM. REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
BROUGHT FORWARD						
3.9	SANS 10299-5	Equipment and installation a) Wet End Submersible Pump up to(10l/s 220@m). b) Submersible pump motor to deliver as per pump specification c) Box casing for control panel and Ancillaries d) Supply and Installation of 4 Core Submersible Cable e) Splicing kit f) Safety Cable @ 100m g) Galvanized Baseplate and Consumables h) Non-Return valve (80mm dia) i) HDPE CL12 @63mm water supply m) UPVC Fittings and Consumables to connect to 63mm dia to o) Borehole Probe p) Supply and Install control panel with all cabling and wiring q) Galv inlet Pipe - 80mm dia x 50m, including fittings and gate valve				
3.9.1		No	3			
3.9.2		No	3			
3.9.3		No	3			
3.9.4		m	200			
3.9.5		No	3			
3.9.6		No	3			
3.9.7		p/bh	3			
3.9.8		p/bh	3			
3.9.9		m	200			
3.9.10		Sum	1			
3.9.11		No	3			
3.9.12		No	3			
3.9.13		Sum	1			
3.10	SANS 10299	MISCELLANEOUS Borehole Yield and Water Quality Testing: [Borehole development. Step test 12-hour constant discharge 100m/borehole) under the supervision of the Geo-hydrologist/Geo-hydrological Engineer] Supply and install Communal Standpipes, 6x Taps with anti-theft systems, quick couplers & flexible supply pipes, spotwelded bolts, nuts & pipes.	p/bh	2		
3.11	SANS 1200	No	1			
3.12		Prov Sum	1		R	650 000,00
3.13		Prov Sum	1		R	500 000,00
3.14	SANS 10299-5	Prov Sum	1		R	350 000,00
3.14.1		Prov Sum			R	500 000,00
3.14.2		Prov Sum	1		R	200 000,00
3.14.3		%	1			
		TOTAL SCHEDULE 3 CARRIED FORWARD TO SUMMARY				



Tenderer



Witness 1



Witness 2



Employer



Witness 1



Witness 2



ANGALA DISTRICT MUNICIPALITY		CONSTRUCTION OF BULK WATER SUPPLY AND STORAGE AT HLALANIKAHLE AND EXTENSION 5			
SCHEDULE 4 : SECTIONAL STEEL TANK					
ITEM NO	PAYM. REF.	DESCRIPTION	UNIT	QTY	RATE
4.1	SABS1200 C	SECTIONAL STEEL TANK SITE CLEARANCE: Clear and grub site for steel water tank	m ²	210	
4.1.1	8.2.1				
4.2	SANS	EARTHWORKS			
4.2.1	8.3.2	EXCAVATIONS FOR STRUCTURES: a) Excavation in all materials for tank foundations and use for backfill, compacted to 95% AASHTO density, or embankment or dispose of surplus materials as instructed <u>Extra-over item 3.2.1.1 for</u>	m ³	210	
4.2.1.1	8.3.2				
4.2.1.2		a) Intermediate excavation	m ³	10	
4.2.1.3		b) Hard rock excavation	m ³	10	
4.2.2	SANS1200D	BACKFILLING AND BEDDING			
4.2.2.1	8.3.4	a) Imported backfill material from designated borrow pit, compact to 95% AASHTO density (unless otherwise indicated) and finishing off of area, :	m ³	5	
4.2.2.2		b) Backfilling (150mm layer) under structures and compacted to 98%mod. AASHTO max. density	m ³	2	
4.3	SABS 1200G 8.1.3	CONCRETE			
4.3.1	8.4.3	Grade 15/20 mass concrete for pipe support blocks and / or as instructed by the Engineer.	m ³	10	
4.3.2		Grade 25/20 strength reinforced concrete in:			
4.3.3		a) Foundations and stub columns	m ³	128	
		b) Grouting under base plate ABE DuragROUT or similar approved	m ³	9	
4.4	SANS 1200G	FORMWORK:			
4.4.1	8.2.2	a) Smooth vertical formwork to tank foundations	m ²	128	
4.5	SANS	UNFORMED SURFACE FINISHES:			
4.5.1	8.4.4a	<u>Wood float finish</u>			
4.5.1	SANS 1200G SANS	a) Top of foundations	m ²	64	
4.6		REINFORCEMENT			
4.6.1	8.3.1	<u>Mild /steel bars</u>	t	4	
4.6.1		a) 8mm			
4.6.2	8.3.1	<u>High tensile steel bars</u>	t	12	
4.6.2		a) 12mm			
4.6.3	8.3.1	b) 16mm	t	4	
4.6.3					
4.6.4	8.3.2	<u>High tensile steel mesh</u>	m ²	0	Rate Only
4.6.4		a) Ref no 395			
4.6.5		b) Ref no 888	m ²	0	Rate Only
CARRIED FORWARD					

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



Project No: 185527

CONSTRUCTION OF BULK WATER SUPPLY AND STORAGE AT
HLALANIKAHLE & EXTENSION 5

NKANGALA DISTRICT MUNICIPALITY

BULK WATER SUPPLY AND STORAGE AT HLALANIKAHLE AND EXTENSION 5
SCHEDULE 4 : SECTIONAL STEEL TANKSchedule 4
Sectional Steel Tank

ITEM NO	PAYM. REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
BROUGHT FORWARD						
4.7	SABS 1200L					
4.7.1		PIPE WORKS a) 150mm steel for inlet pipe complete with valves and	Sum	1		
4.7.3		b) 100mm steel for scour pipe complete with valves and chamber	Sum	1		
4.7.4		c) 150mm steel for outlet pipe complete with valves and	Sum	1		
4.8		d) 100mm steel for overflow pipe complete with valves and	Sum	1		
		MISCELLANEOUS				
4.8.1		Supply, deliver to site and install a 1000KL galvanized elevated sectional steel tank on 15m steel stand (15m high), complete with, galvanized roof covers 1.2mm thick, mechanical water level indicator, internal & external access ladder, landing platform complete with roofing and handrailing complete with all galvanized steel pipe (inlet, outlet, overflow, scour)	Sum	1		
4.8.2		Outlet valve chamber supply and install as per drawing no: GS-185527-W-303	No	3		
TOTAL SCHEDULE 4 CARRIED FORWARD TO SUMMARY						

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



		Schedule 5 Water Treatment Building				
NKANGALA DISTRICT MUNICIPALITY BULK WATER SUPPLY AND STORAGE AT HLALANIKAHLE AND EXTENSION 5 SCHEDULE 5 : WATER TREATMENT BUILDING						
ITEM NO	PAYM. REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
5.1.1	5.1.1	SECTION: WATER TREATMENT BUILDING EARTHWORKS: Restricted excavations in all materials up to 1.5m deep for strip foundations	m ³	18		
5.1.2	8.2 8.3.3	Extra over Item 10.1.1 for: intermediate excavation	m ³	4		
5.1.3	PSD6.5	Hard rock excavation	m ³	2		
5.1.4	PSD6.9	Scarf and compact in-situ surface, in G5 and G7 material, in 150mm layer to 90% Mod AASHTO maximum density.	m ²	24		
5.1.5	8.3.9	Extra over Items 101.1.1 to 101.1.4 for backfilling around structures:				
5.1.5.1	8.3.9 PSD6.9	Backfill under surface bed with suitable (at least G7) material previously excavated and stockpiled and compact to 93 % Mod AASHTO maximum density at o.m.c in 150mm layers	m ³	8		Rate only
5.1.6	8.3.4	Backfill under surface beds with G7 imported material from commercial source and compact to 93% Mod AASHTO maximum density at o.m.c in150mm layers	m ³	6		
5.2	SABS 1200G	CONCRETE Grade 25/20 concrete in:				
5.2.1	8.1.3	600mm x 250 mm strip foundations	m ³	6		
5.2.2	8.4.3	Concrete surface bed	m ³	2		
5.2.3		Concrete apron around building	m ³	4		
5.2.4		25mm Screed on top of surface bed	m ²	18		
5.3	8.2.2	FORMWORK Smooth narrow width vertical formwork to the side of apron	m ²	6		
5.3.1	8.4.4	UNFORMED SURFACE FINISHES				
5.4	PSG6.4	Wood float finish	m ²	58		
5.4.1	8.5 PSG6.5	JOINTS Expansion joints in concrete apron	m	16		
5.5		BRICKWORK AND MASONRY				
5.5.1		230mm Brick walls in facebrick to external faces and general-purpose bricks to internal faces	m ²	90		
5.6		115mm Brickwalls in general purpose bricks to internal walls	m ²	14		
5.6.1		115mm Face brick beamfilling between trusses	m ²	20		
5.6.2		Precast concrete lintels above windows	m	8		
5.6.3		12mm Thick smooth plaster finish	m ²	60		
5.6.4		Glazed non-slip ceramic tiles to floor of Water treatment Building	m ²	19		
5.6.5		White glazed ceramic tiles to internal wall at hand washing basin.	m ²	2		
5.6.6		250-micron PVC sheet under surface bed to Water treatment Building	m ²	18		
TOTAL CARRIED FORWARD						

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



NKANGALA DISTRICT MUNICIPALITY		Schedule 5 Water Treatment Building									
BULK WATER SUPPLY AND STORAGE AT HLALANIKAHLE AND EXTENSION 5											
SCHEDULE 5: WATER TREATMENT BUILDING											
ITEM NO	PAYM.REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R					
TOTAL BROUGHT FORWARD											
5.7.		DOORS AND WINDOWS									
5.7.1		2032 x 813 Standard single rebate framed, ledged and braced hardwood external door	No	4							
5.7.2		Type ND2 standard residential steel window frames, complete with 4mm thick clear glass and burglar bars	No	2							
5.7.3		Type NE1 standard residential steel window frames, complete with 4mm thick frosted glass and burglar bars	No	2							
5.7.4		Supply and install security gate to external access door	No	2							
6.8		ROOF TIMBERS AND FINISHES									
5.8.1		Howe Type Roof trusses manufactured from min SAP Grade 5 or better (CCA treated) , Galv. Gang nail plated joints, trusses spaced at max 1,2m c/c, 6,32mm wall c/c span. Include runners, rafters/purlins, bracing & wall plate.	m ²	44							
5.8.2		0.58mm Thick class Z275 Global-tech CIS Super seal 500 roof sheeting finished in traffic green colour	m ²	44							
5.8.3		6.4mm Thick gypsum ceiling board fixed on 38 x 38 brandering at 450mm centres with 38mm glass fibre insulation, complete, including 75mm coved gypsum cornice and painted	m ²	18							
5.8.4		4mm Thick FC ceiling on 38x38mm SAP brandering, complete, and painted	m ²	20		Rate only					
5.8.5		125 x 100mm Galvanised gutter complete	m	2							
5.8.6		76mm Galvanised downpipes, complete with bends and	m	8							
5.8.7		300x15mm FC facia boards, complete, and painted to Engineers specification	m	36							
6.9		ELECTRICAL INSTALLATION									
5.9.1		Provide for the electrical installation to water treatment building	Prov Sum		R	80 000.00					
5.9.2		Mark-up by the Contractor on amount in Item 5.9.1 for electrical installation to the water treatment building.	%	1							
5.10		MISCELLANEOUS									
5.10.1		Provide 4,5 kg fire extinguisher/protection to water treatment building.	No	4							
TOTAL SCHEDULE 5 CARRIED FORWARD TO SUMMARY											



Tenderer



Witness 1



Witness 2



Employer



Witness 1



Witness 2



NKANGALA DISTRICT MUNICIPALITY

Schedule 6

Fencing Works

SCHEDULE 6: FENCING WORKS

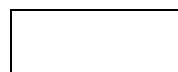
ITEM NO	PAYM. REF.	LI	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
6.1	SANS 1200 C		SITE CLEARANCE				
6.1.1	8.2.1	LI	Clear vegetation and trees of girth up to 1 m for a strip of 5m wide	m ²	60		
6.1.2	8.2.2	LI	Remove and grub large trees and tree stumps of girth over 1 m	no	1		
6.2	SANS		EARTHWORKS				
6.2.1	8.3.1 b)		<u>Excavation in all materials and use for embankment or backfill or dispose, as ordered the engineer</u>				
		LI	a) Fencing posts, stays, corner posts, etc	m ³	3		
6.2	SANS 1200 GA		CONCRETE:				
6.2.1	8.4.3	LI	<u>Grade 25/19 strength reinforced concrete in:</u>	m ³	3		
		LI	a) Fencing posts, stays, corner posts, etc				
6.3			MISCELLANEOUS ITEMS:				
6.3.1		LI	Clearview fencing, 1,8m high complete zinc coating, fully Galvanised	m	60		
6.3.2		LI	730mm Razor wire concertina coil on top of the fencing, complete with all posts, stays, wires etc	m	60		
6.3.3		LI	Clearview sliding vehicle access gate, clear width 6m, 1,8m high complete with support posts, track, locking mechanism etc	No	1		
TOTAL SCHEDULE 6 CARRIED FORWARD TO SUMMARY							



Tenderer



Witness 1



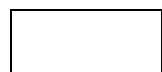
Witness 2



Employer



Witness 1



Witness 2



NKANGALA DISTRICT MUNICIPALITY BULK WATER SUPPLY AND STORAGE AT HLALANIKAHLE AND EXTENSION 5							Schedule 7
SCHEDEULE 7 : DAYWORKS (Provisional)							Dayworks
ITEM NO.	PAY M. REF.	LI	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
7							
7.1			Dayworks Labour				
7.1.1			Contractor's Representative	hr	40		
7.1.2			Surveyor	hr	16		
7.1.3			Qualified artisan	hr	40		
7.1.4			Foreman, leader-hand (9 hr/workday)	workday	5		
7.1.5			Semi-skilled labourer (9 hr/workday)	workday	10		
7.1.6			Labourer (9 hr/workday)	workday	30		
7.2			Plant hire : Work Rates on Site				
7.2.1			<u>Tipper truck (specify capacity)</u>				
	a)		5m ³ (small)	hr	27		
7.2.2			<u>Flat bed truck (specify capacity)</u>				
	a)		5 ton (small)	km	250		
7.2.3			LDV	km	250		
7.2.4			Wheel loader: m ³ bucket (specify type)	hr	40		
7.2.5			<u>Bull dozer</u>				
	a)	 m ³ (small)	hr	27		
7.2.6			<u>TLB (Tractor Loader Backhoe)</u> (..... m ³ bucket) (specify type)				
7.2.7			<u>Compactor</u>				
	a)	 (specify applied force) kg	hr	27		
7.2.8			<u>Concrete mixer (specify dry/wet capacity)</u>				
	a)	 (small towable)	hr	45		
7.2.9			<u>Miscellaneous</u>				
	a)		Compressor with capacity of ± 10m ³ /min	hr	45		
	b)		Water pump with 80mm outlet - diesel driven	hr	45		
TOTAL SCHEDULE 7 CARRIED FORWARD TO SUMMARY							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



Project No: 185527

CONSTRUCTION OF BULK WATER SUPPLY AND STORAGE AT
HLALANIKAHLE & EXTENSION 5

NKANGALA DISTRICT MUNICIPALITY

BULK WATER SUPPLY AND STORAGE AT HLALANIKAHLE AND EXTENSION 5

SUMMARY TO THE BILL OF QUANTITIES

SCHEDULE	DESCRIPTION	AMOUNT
1	Preliminary & General	R -
2	Pipeworks	R -
3	Boreholes	R -
4	Sectional Steel Tank	R -
5	Water Treatment Building	R -
6	Fencing	R -
7	Dayworks (Provisional)	Rate Only
SUB TOTAL A		R -
Allow 10% of Sub Total A for Contingencies to be used at the discretion of the Employer and deducted in whole or in part if not required		R -
SUB TOTAL B		R -
VAT @ 15% of Sub Total B		R -
TOTAL OF PRICES INCLUDING VAT CARRIED OVER TO THE FORM OF OFFER		R -



Tenderer



Witness 1



Witness 2



Employer



Witness 1



Witness 2